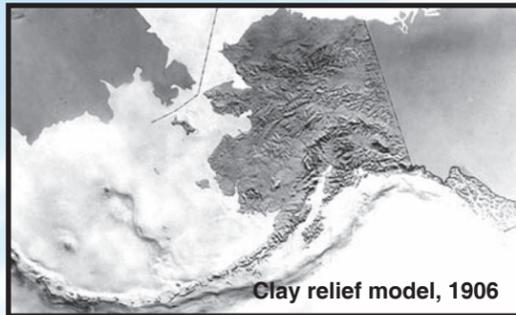


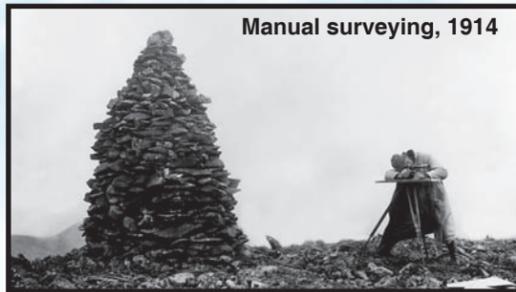


Exploration and Economics

In 1895, Congress appropriated \$5,000 for the USGS to begin land surveying and mineral exploration activities in Alaska. During 1898, USGS geologists examining gold deposits traveled and explored the Yukon River and the Klondike area. (This was just prior to the historic gold rush!) USGS continues to examine Alaska's natural resources more than 100 years later.



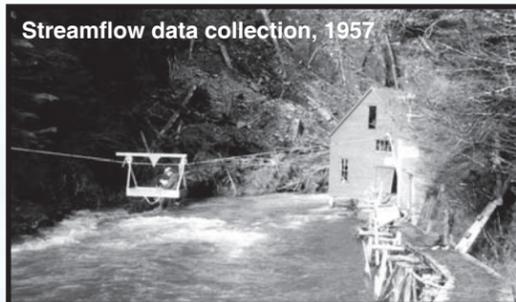
Clay relief model, 1906



Manual surveying, 1914



Exploration, 1930



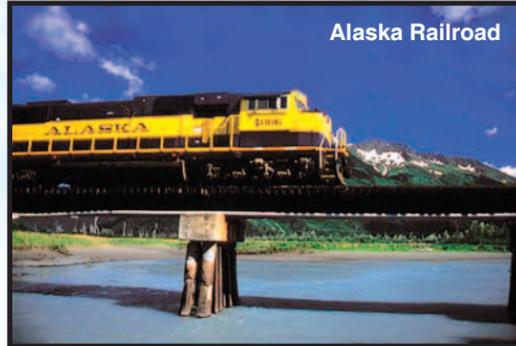
Streamflow data collection, 1957



Road damaged by thawing permafrost, 1958

Infrastructure

In the late 1890's, the USGS initiated reconnaissance programs to map topographic features, expand mineral exploration activities, and explore transit routes. USGS continues to provide valuable scientific knowledge to assist in the planning, design, and development of modern transportation and pipeline corridors of the 21st century.



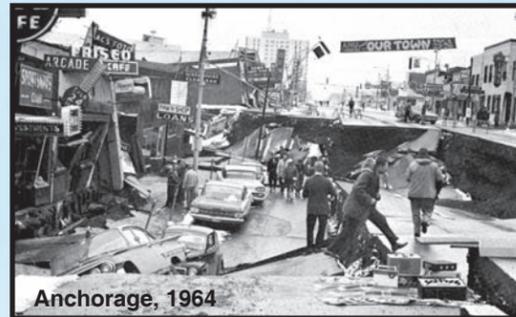
Alaska Railroad



Trans-Alaska Pipeline



Bridge damaged by stream scour



Anchorage, 1964



Fairbanks, 1967

Hazards

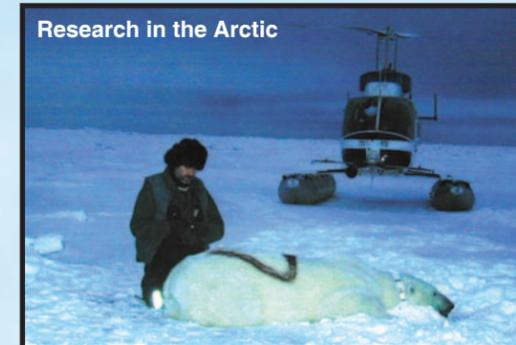
An early and continuing mission of the USGS has been to investigate hazards related to earthquakes, floods, volcanoes, landslides, and other natural and man-made events. This hazard research expands the understanding of their effects on the environment and helps limit their impacts on our communities.



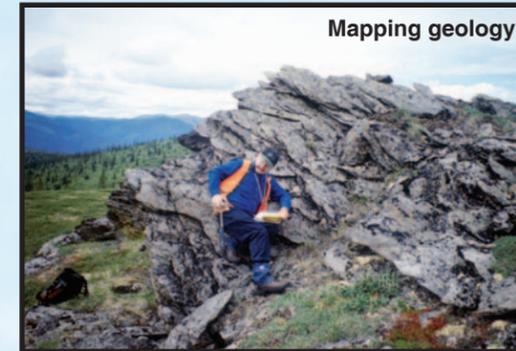
Augustine Volcano, 1986



Oiled duck, 1989



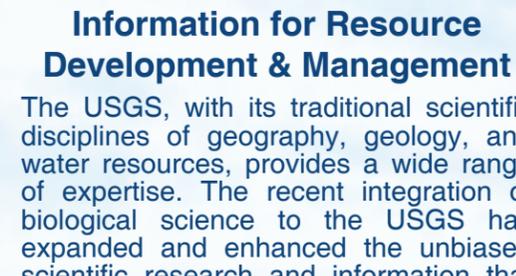
Research in the Arctic



Mapping geology

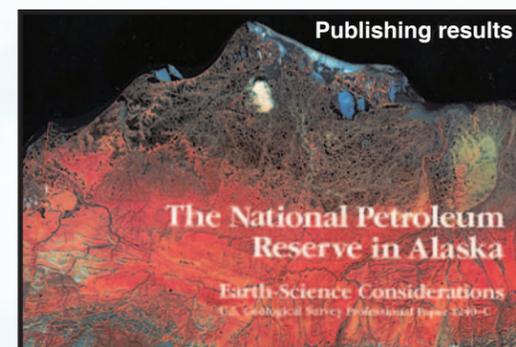


Acquiring stream data

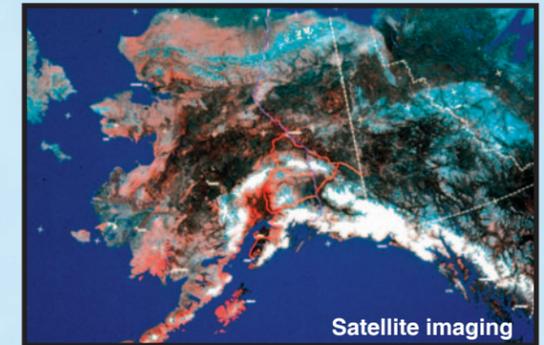


Information for Resource Development & Management

The USGS, with its traditional scientific disciplines of geography, geology, and water resources, provides a wide range of expertise. The recent integration of biological science to the USGS has expanded and enhanced the unbiased scientific research and information that is available for resource management decisions.



Publishing results



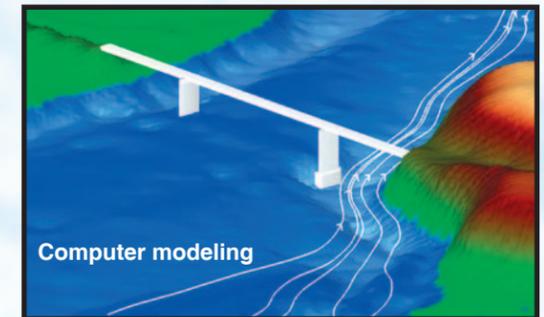
Satellite imaging



Tracking migration



Measuring movement



Computer modeling

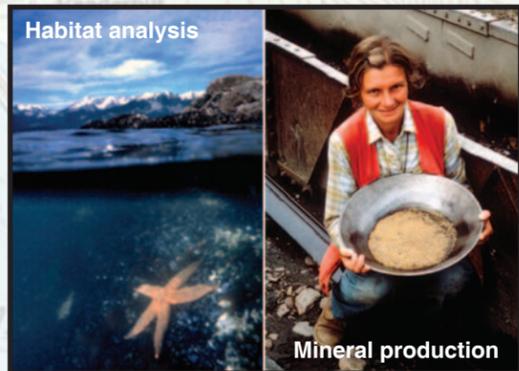
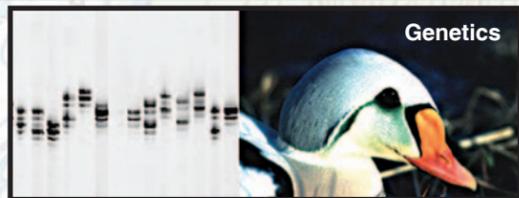
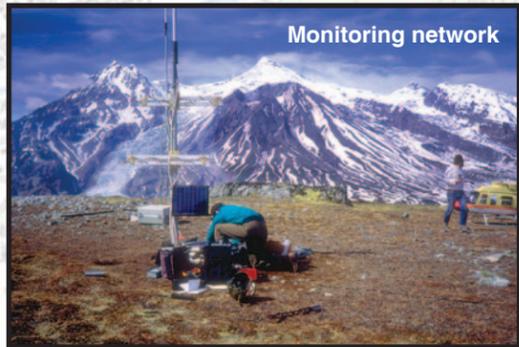
Adapting Modern Technologies

Today, the USGS continues to investigate, develop, and apply new technologies to provide current, unbiased, and up-to-date scientific information to a vast number of users such as Federal, State, and local governments; Native interests; and the general public. Visit and explore the USGS website at <http://alaska.usgs.gov>.



Connecting with the People and Needs of Alaska





The USGS serves the Nation by providing reliable scientific research and information to the public.

USGS helps Alaska

USGS research and mapping help reduce potential damage to Alaska's infrastructure.

USGS genetic research helps characterize the changing makeup of living resources.

USGS glacier studies help reveal effects of global climate change.

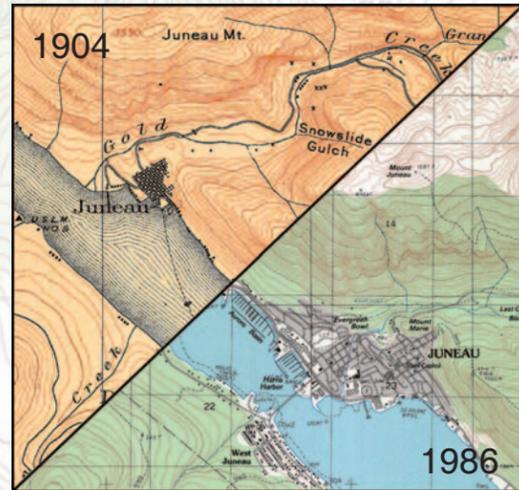
USGS near-real-time data help direct rapid response to hazardous events such as floods, earthquakes, or volcanic eruptions.

USGS ecosystem and habitat studies help show response to changing environments.

USGS research into the origin, resource potential, and environmental behavior of mineral deposits helps determine land use decisions.

Explore USGS SCIENCE HELPING YOU
<http://alaska.usgs.gov>

★ Water ★ Hazards ★ Geology ★ Geography ★ Biology



Established in 1879, the USGS was directed to conduct "the classification of the public lands, and examination of the geologic structure, mineral resources, and products of the national domain."



Did you know the USGS began exploring Alaska in 1895?

... and ever since has been setting standards for quality control and devising techniques for research and analysis in geography, geology, hydrology, and most recently biology

... in order to provide accurate, objective, and timely information, data, and research

... about the earth and its natural resources

... that can be **used by everyone!**

<http://alaska.usgs.gov>

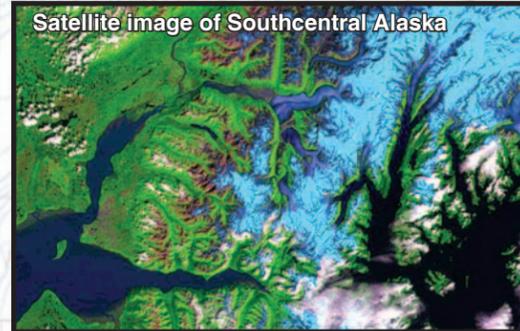
The USGS works with Federal, State, and local agencies to:

- better understand the distribution of minerals, energy, and other natural resources
- provide maps and information
- improve infrastructure safety
- respond to emergency events

The USGS is the principal science agency for the Department of the Interior and has provided

Information to the public for 125 years

<http://www.usgs.gov>



125 years of science for America ★ ★ ★ ★ ★ 1879-2004



DNA strand